

YARROW (H. C.)

LIST

OF

MARINE FISHES

COLLECTED ON THE

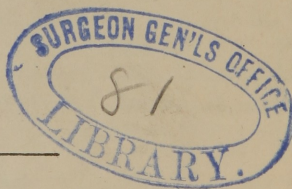
COAST OF CALIFORNIA, NEAR SANTA BARBARA, IN 1875,

WITH NOTES BY

DR. H. C. YARROW,
ACTING ASSISTANT SURGEON, U. S. A.,

AND

H. W. HENSHAW.



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LIST OF MARINE FISHES COLLECTED ON THE COAST OF CALIFORNIA, NEAR SANTA BARBARA IN 1875, WITH NOTES BY DR. H. C. YARROW, ACTING ASSISTANT SURGEON U. S. A., AND H. W. HENSHAW.

UNITED STATES ENGINEER OFFICE,
GEOGRAPHICAL SURVEYS WEST OF THE 100TH MERIDIAN,
June 1, 1878.

SIR: The following list includes such species of the fishes collected on the coast of California during the season of 1875 as we have been able to identify. A number of other species were secured, but have not been introduced here, as, differing more or less from accepted forms, it has been deemed advisable, before pronouncing definitely upon them, to wait for Professor Gill's "*Revision of the Fishes of the West Coast of the United States*," now in course of preparation. The fishes obtained form a portion of the marine collections made by the natural-history party, which was especially organized for the purpose of exploring the neighborhood of Santa Barbara for Indian antiquities. No thorough investigations in this direction could be attempted, which is the more to be regretted as the waters about Santa Barbara and the contiguous islands are extremely rich in marine life, but the collections were limited to such as could be made without interfering with the main purpose of our visit. Through the courtesy and at the suggestion of Captain Taylor, of the Coast Survey steamer Hassler, a visit was made to the island of Santa Cruz by Mr. Henshaw for the express purpose of using the Hassler's seine, a rich haul being anticipated in the shallow water of one of the small bays of the island. Unfortunately, unpropitious weather interfered very seriously with the plan, and but few species rewarded such efforts as were possible under the circumstances.

We are indebted to Mr. Paul Schumacher, at that time exploring the mounds on Santa Cruz Island at the instance of the Smithsonian Institution, for many specimens in the collection. Owing to the obliteration of most of the labels, we are unable to credit him or the other collectors in full.

Very respectfully, your obedient servants,

H. C. YARROW.
H. W. HENSHAW.

Lieut. GEO. M. WHEELER,
Corps of Engineers, in charge.

PLEURONECTIDÆ.

PLATICHTHYS sp.

A few specimens of flounders were taken in nets near La Patera, north of Santa Barbara, which we have not determined.

Smith. No.	Orig. No.	Locality.	Date.	Collector.	No. of specs.
17063	1046	La Patera.....	July, 1875	Dr. H. C. Yarrow.....	4

PAROPHRYS VETULUS Grd.

A single specimen, from same locality as preceding.

Smith. No.	Orig. No.	Locality.	Date.	Collector.	No. of specs.
17064	1020 F	La Patera.....	July, 1875	Dr. H. C. Yarrow.....	1

BLENNIIDÆ.

HETEROSTICHUS ROSTRATUS Grd.

A peculiar and readily recognized species from the extreme length of the dorsal fin, which reaches from the occiput nearly to the caudal. The anal is also very long. The lateral line is arched above the pectorals. Color yellowish-brown above with trans-

verse brownish blotches. Is quite abundant near Santa Barbara and esteemed as an excellent table-fish, but to our taste is far inferior to some of the other species.

Smith. No.	Orig. No.	Locality.	Date.	Collector.	No. of specs.
17021	1018 A	Santa Barbara	July, 1875	H. W. Henshaw	2
17022	1020 B	.....do .....	.....do	Mr. Schumacher	1
17023	1070 F	.....do .....	.....do	Dr. H. C. Yarrow.....	2

BATRACHIDÆ.

PORICHTHYS NOTATUS Grd.

Color in life dark bluish-violet; belly and sides silvery ashy-white. The four series of pores on each side resemble spots of gold. There is a dark patch beneath each eye.

Abundant near Santa Barbara. Although repulsive in appearance, this species is justly esteemed as a most delicate and edible food-fish. Bites readily at the hook.

Smith. No.	Orig. No.	Locality.	Date.	Collector.	No. of specs.
17046	1020	Santa Barbara	July, 1875	Dr. H. C. Yarrow.....	5

COTTIDÆ.

CLINOCOTTUS ANALIS (Grd.) Gill.

This is an abundant species along the coast, and, at low tide, may be found in almost every little pool, where it hides beneath the rocks and among the sea-weeds. Like other members of the family, its colors are protective, the hues corresponding so closely with surrounding objects that it needs careful scrutiny to detect the fish. Doubtless this fact is of use as enabling the fish to seize its unwary prey.

Smith. No.	Orig. No.	Locality.	Date.	Collector.	No. of specs.
17059	964	Santa Cruz Island	June, 1875	H. W. Henshaw	2
17060	848	.....do .....	.....do	Dr. O. Loew	2

SCORPÆNIDÆ.

SEBASTOMUS ROSACEUS (Grd.) Gill.—Rosy Rock Cod.

Fishes of this genus are called on the coast "Rock Fish" or "Rock Cod," and vary in size from 1 to 4 pounds. The flesh is fine-grained and excellent, and many are caught for the market by the Italian fishermen, who readily dispose of all they can take. They abound in localities in the vicinity of the Santa Barbara Channel islands, and are easily taken with hook and line, the best bait being either crawfish (lobster, so called) or the fleshy parts of *Haliotis*. Occasionally they are caught by trolling.

Smith. No.	Orig. No.	Locality.	Date.	Collector.	No. of specs.
17057	1011 A	Santa Barbara	July, 1875	Dr. H. C. Yarrow.....	1
17040	1011 B	.....do .....	.....do	H. W. Henshaw	1

LABRIDÆ.

PIMELOMETOPON PULCHRER (Ayres) Gill.

This large and beautiful species is quite common on the southern coast of California, and specimens were seen at Santa Barbara which had been taken near San Miguel Island in the channel. Dr. Streets, U. S. N., secured one specimen on the coast of Lower California 27 inches in length, 7 inches in height.

Smith. No.	Orig. No.	Locality.	Date.	Collector.	No. of specs.
17042	Santa Barbara	July, 1875	Yarrow & Henshaw	2

POMACENTRIDÆ.

HYPSYPOPS RUBICUNDUS (Grd.) Gill.

Tolerably common. A single beautiful specimen secured, which was bright red in life.

Smith. No.	Orig. No.	Locality.	Date.	Collector.	No. of specs.
17043	1017 B	Santa Barbara	July, 1875	Dr. H. C. Yarrow	1

CHROMIS ATRILOBATUS Gill.

A few specimens collected near Santa Barbara. Is rather uncommon.

Smith. No.	Orig. No.	Locality.	Date.	Collector.	No. of specs.
17042	Santa Barbara	July, 1875	Yarrow & Henshaw	1

SCOMBRIDÆ.

At Santa Barbara, in July, a number of specimens belonging to this family were taken by hook and line, off the wharf, by boys. They were called "Pompano"; but, as none could be purchased, we have not been able to identify the species.

SCLÆNIDÆ.

MENTICIRRUS UNDULATUS (Grd.) Gill.—King-fish.

Color above ashy silvery-white, with brownish-white spots forming undulatory bands; beneath, of a metallic yellow.

This species appears to be tolerably abundant along the coast, as near Carpenteria, below Santa Barbara, and numbers were frequently seen in the boats of the fishermen. The largest noted were about 10 inches in length.

Smith. No.	Orig. No.	Locality.	Date.	Collector.	No. of specs.
17039	1017	Santa Barbara	July, 1875	Dr. H. C. Yarrow	1

SERRANIDÆ.

PARALABRAX CLATHRATUS Grd.

Color brown above, with a purplish shade; below, dull whitish. A series of dark blotches along the sides and back.

Abundant near the islands in Santa Barbara Channel, where generally found in close proximity to the rocks. We had no difficulty in getting them to take the hook when baited with mussel or shellfish. Our slender supply of hooks and lines was, however, entirely exhausted in vain attempts to land one of these large and voracious fish, their strength proving equal to every emergency.

Smith. No.	Orig. No.	Locality.	Date.	Collector.	No. of specs.
17037	946	Santa Cruz Island.	June, 1875	H. W. Henshaw	6
17038	C	Santa Barbara	July, 1875	Dr. H. C. Yarrow	7

SPHYRÆNIDÆ.

SPHYRÆNA ARGENTEA Grd.

Color bluish-black above; white on sides; beneath, yellowish with a dark lateral line; silvery reflections. Abundant near Santa Barbara and to the southward. Are generally taken in nets or by trolling. Eaten by the poorer classes.

Smith. No.	Orig. No.	Locality.	Date.	Collector.	No. of specs.
17035	1076 D	Santa Barbara	July, 1875	Dr. H. C. Yarrow	2
17036	1020 B	.....do .....	.....do	Yarrow & Schumacher	1

ATHERINIDÆ.

CHIROSTOMA CALIFORNIENSIS (Grd.) Gill.—California Smelt.

This beautiful species is extremely abundant in the vicinity of Santa Barbara, and, in fact, all along the coast. Great numbers are taken by the fishermen in nets and also by hook and line, immense hauls being sometimes made by the former method. They frequent the sandy and muddy bays from February to October, April being about the height of the season. They bite ravenously at any kind of bait, worms, mussels, &c. Specimens are occasionally taken weighing two pounds. They swim, in enormous schools, about 3 feet below the surface of the water.

Smith. No.	Orig. No.	Locality.	Date.	Collector.	No. of specs.
17015	1020 A	Santa Barbara	July, 1875	Dr. H. C. Yarrow	3
17016	1019	.....do .....	.....do	H. W. Henshaw	4
17017	1076 G	.....do .....	.....do .....	.....do	1
17018	1076 B	.....do .....	.....do	Dr. H. C. Yarrow	2
17019	945 A	Santa Cruz Island	June .....	.....do	1
17020	.....	Santa Barbara	July .....	.....do	1

OXYJULIS MODESTUS (Grd.) Gill.

Color reddish-brown, lighter on the sides, yellowish-white beneath; a black spot at base of dorsal rays and a similar blotch at base of caudal fin.

Common along the coast; many are taken at Santa Barbara, inside the kelp, with hook and line and nets. Some specimens secured are much larger than any noticed by Girard.

Smith. No.	Orig. No.	Locality.	Date.	Collector.	No. of specs.
17024	1076 A	Santa Barbara	July, 1875	Dr. H. C. Yarrow	1
17025	1076 C	.....do .....	.....do .....	.....do	7
17026	1020 E	.....do .....	.....do .....	.....do	1
17027	1012	.....do .....	.....do	Dr. H. C. Yarrow	50

EMBIOTOCIDÆ.

The viviparous or Sapphire Perch, so called, are very numerous represented all along the Pacific coast, 15 or 16 distinct species being recognized. Most of them will take almost any kind of bait readily, but the smaller species bite the best.

EMBIOTOCA JACKSONI Agass.

Color dusky-brown above, with patches of rufous or yellowish-brown beneath.

Many are taken at the Santa Barbara wharf, in company with others of the genus.

Smith. No.	Orig. No.	Locality.	Date.	Collector.	No. of specs.
17047	1018 B	Santa Barbara	July, 1875	Yarrow & Henshaw	1
17048	1814 B	.....do .....	.....do	Dr. H. C. Yarrow	2
17049	1076 C	.....do .....	.....do .....	.....do	1
17050	988 A	.....do .....	.....do .....	.....do	1

TENIOTOCA LATERALIS (Agass.) A. Agass.

A single specimen secured, thought to be of this species.

Smith. No.	Orig. No.	Locality.	Date.	Collector.	No. of specs.
17051	Santa Cruz Island	July, 1875	H. W. Henshaw	1

CYMATOGASTER AGGREGATUS Gibbons.

This species, formerly known as *Holconotus rhodoterus* Girard, is by far the most abundant of the viviparous perches near Santa Barbara, and we have taken hundreds off the wharf at that place with the hook baited with lobster. It struck us as very peculiar that nearly all the individuals taken were females gravid with young, which at this time (July) appeared to have almost reached maturity. Upon gently squeezing the abdomen of fish just taken from the water, the genital sac escaped, and through the transparent membrane the young fish could be seen. Some of the sacs were cut

open, and the young thrown into the sea, when they immediately swam away pursued by other species. This rather rude obstetrical operation did not seem to affect the general condition of the mother, who also swam briskly away when thrown into the water. The number of young in the pouch varies from 8 to 20. The genital orifice is behind the anus. As food, the viviparous perch may be compared in respect to flavor to the ordinary white perch of the Eastern waters, but the flesh is less fine and a trifle strong in flavor.

Color above varies from silvery gray to bluish gray, with transverse golden bars on the belly. It is generally supposed to arrive off the coast in May.

Smith. No.	Orig. No.	Locality.	Date.	Collector.	No. of specs.
17028	1014	Santa Barbara	July, 1875	Dr. H. C. Yarrow	1
17029	745	Santa Cruz Island	June, 1875	H. W. Henshaw	3
17030	1073 B	Santa Barbara	July, 1875	Dr. H. C. Yarrow	8
17031	1076	.....do .....	.....do .....	.....do	50
17032	1011	.....do .....	.....do .....	.....do	45
17033	A	.....do .....	.....do .....	.....do	1
17034	981 A	.....do .....	.....do .....	.....do	75
17061	1073	.....do .....	.....do .....	.....do	10

HYPERPROSOPON ARGENTEUS Gibbons.

Color ashy-brown above; sides and abdomen dull yellowish-white; fins yellow at bases, grayish near extremities.

Is generally found on the coast to the north of San Francisco. Is tolerably abundant. Our specimens were purchased of fishermen, and we are unable to say if this species will take the hook.

Smith. No.	Orig. No.	Locality.	Date.	Collector.	No. of specs.
17052	B	Santa Barbara	July, 1875	Dr. H. C. Yarrow	1
17053	1076 H	.....do .....	.....do .....	.....do	2

HOLCONOTUS RHODOTERUS Agass.

Color greenish-brown above, silvery on sides; obscure bars or band along sides.

Two specimens were procured from fishermen. Like the preceding, this fish is found farther to the north.

Smith. No.	Orig. No.	Locality.	Date.	Collector.	No. of specs.
17054	1020 C	Santa Barbara	July, 1875	Yarrow & Henshaw	2

AMPHISTICHUS ARGENTEUS Agass.

Color olivaceous, presenting a somewhat mottled appearance; sides silvery; indistinct bars on the flanks. Resembles the preceding species, but differs in conformation of the lower lip, which is united, not free.

Smith. No.	Orig. No.	Locality.	Date.	Collector.	No. of specs.
17055	1014 B	Santa Barbara	July, 1875	Dr. H. C. Yarrow	2

GALEORHINIDÆ.

TRIACIS SEMIFASCIATUS Grd.

Representatives of this family were quite numerous at Prisoner's Harbor, Santa Cruz Island, being attracted inshore by the numerous carcasses of sheep killed and thrown into the water. Young only were secured by the seine.

Smith. No.	Orig. No.	Locality.	Date.	Collector.	No. of specs.
17045	1076 C	Santa Barbara	July, 1875	Dr. H. C. Yarrow	1

Lieut. GEORGE M. WHEELER,
Corps of Engineers, in charge.

